J. COLLUM.

Cooking Stove.

No. 340. Patented July 29, 1837.

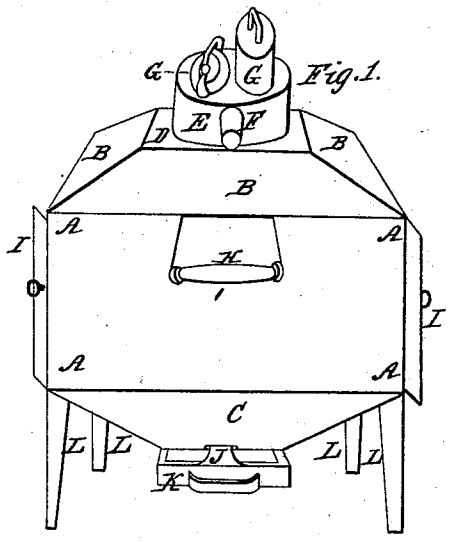

Fig. 1.

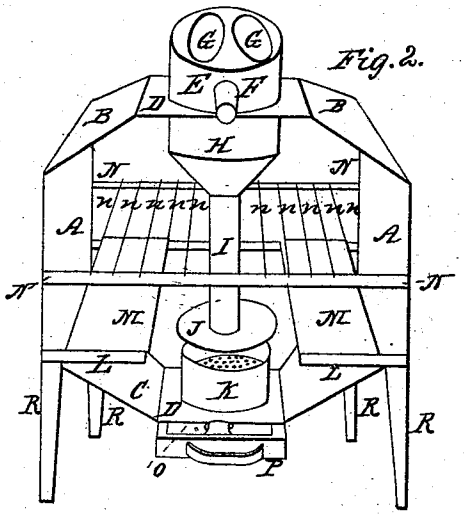

Fig. 2.

Witnesses:
William Lincoln
Alex. Hamilton

Inventor:
John Collum

UNITED STATES PATENT OFFICE.

JOHN COLLUM, OF GRAFTON, MASSACHUSETTS.

COOKING-STOVE.

Specification of Letters Patent No. 340, dated July 31, 1837.

To all whom it may concern:

Be it known that I, JOHN COLLUM, of Grafton, in the county of Worcester and Commonwealth of Massachusetts, tin-plate worker, have invented a new and useful Improvement in the Cooking Stove and Baker, called "Collum's Portable Cooking Stove and Baker;" and I do hereby declare that the following is a full and exact description.

The body of the baker or stove consists of an oblong box of tin plate or other metal, set on metal legs of convenient height. The ends are to be made parallel with each other and are provided with doors opening into the interior of the body or oven. The sides are also parallel with each other and the corners are square, the top rises several inches above the body of the stove or baker, and has four sides sloping toward the middle, where a square surface is left with an opening to receive the boiling apparatus. The bottom is sunk several inches below the body of the stove or baker, having, like the top, four sides sloping toward the middle, where another square flat surface, with an opening is formed for receiving a furnace. The top and bottom are in the shape of a truncated pyramid, the former rising above and the latter sinking below the body of the stove or baker.

On the flat surface of the middle of the bottom, is set a small furnace for burning coal or other fuel, with a proper grate. Below this grate is an opening in the bottom of the stove for the admission of air, and to permit ashes and cinders to fall. A plate of metal, sliding on grooves or ledges, is so fixed as to close the opening either partially or entirely, serving as a damper to regulate the draft. Under this damper, a drawer is placed, to receive ashes and cinders from the furnace, having the front and back ends so much lower than the sides as to admit of the passage of air to the furnace above. A cover of sheet iron is placed over the furnace, fitted with a pipe or funnel to convey the heat and smoke generated by the furnace. This pipe is carried through the middle till it reaches above the body of the oven or baker. On the top of the pipe is set a round or oval receiver, shaped like a tunnel at the lower end where it joins to the pipe, swelling out above large enough to receive one or more kettles or boilers to be heated, and rising a few inches above the flat surface of the top of the stoves. The cover of the receiver is made of iron having suitable apertures to receive one or more kettles or boilers. Under it is a smoke pipe like that in common use to carry away the smoke coming from the furnace.

On the inside of the oven of the stove or baker, and on the level of the opening of the doors, a bar is placed longitudinally on each side. Shelves are made to slide on the bars for supporting loaves of bread or other articles to be baked or roasted, or dishes. Above these shelves, at suitable distances, other bars are fastened to the sides to support round or flat bars instead of shelves. These admit of being removed with convenience when large articles are deposited on the shelves under.

When the apparatus is to be used, on removing the kettles or boilers from the top of the stove, wood, coal, or other fuel may be poured through the openings of the top of the receivers into the furnace, and the fire kindled. The heat, ascending through the pipe over the furnace, is radiated through the body or oven of the stove, and on entering the receiver is diffused around the kettles or boilers. From the sloping sides of the top and bottom, the heat is reflected, reverberated, and concentrated on the oven of the baker or stove. The result of this construction is great economy in the consumption of fuel, and great expedition in the process of cooking.

The stove or baker may be constructed of tinplate, sheet iron, copper, or other metal. The inside should be kept bright so as better to reflect the heat from the several surfaces. The size may be such as will best suit the convenience of the family requiring its use. The stove may be very light and portable and fitted with handles so as to be easily removed from place to place.

That which I claim as my invention and desire to secure by Letters Patent is—

The manner in which heat is communicated to and diffused through the oven of the stove or baker in the manner before described.

Dated this eighteenth day of April, in the year of our Lord, eighteen hundred thirty-seven.

References to the drawings of Collum's portable cooking stove or baker:

Figure 1, represents the exterior of the stove or baker; A A A A, the sides of the body of the baker; B B B, sloping sides of

the top; C, sloping side of the bottom; D, flat surface of the top; E, top of the receiver set in the aperture through the top of the stove; F, funnel or pipe to carry off smoke; G G, kettles or boilers set into the receiver; H, handle to move the stove; I I, doors at each end of the stove; J, damper to close the opening under the furnace; K, drawer to receive ashes or cinders; L L L L, legs of the stove.

Fig. 2 is a section of the stove exhibiting the interior and apparatus; A A A A, sides of the body or oven of the baker; B B, sloping sides of the top; C C, sloping sides of the bottom; D D, flat surface of top and bottom; E, top of the receiver set in the aperture through the top of the stove; F, funnel or pipe to carry off smoke; G G, openings in the top of the receiver for kettles or boilers; H bottom of the receiver fitting on the pipe from the furnace; I, pipe from the furnace to the receiver; J, top of the furnace or cover; K, furnace with a grate at the bottom; L L, bars on each side for shelves to slide on; M M, shelves sliding on bars to receive articles to be baked; N N N N, bars on which round or flat metal bars are placed; *n n n*, round or flat movable bars; O, damper to close the opening under the furnace; P, drawer for ashes or cinders; R R R R, legs of the stove.

The above are the references to the drawings of Collum's portable cooking stove or baker.

JOHN COLLUM.

Witnesses:
WILLIAM LINCOLN,
SAM JENNISON.